

WHAT IS CLAIMED IS:

- SECRET
1. A method for detecting corruption associated with a stack in a storage device, the method comprising the steps of:
- inserting a quantity of information adjacent to the stack in the storage device, the quantity of information having an initial state; and
 - inspecting the quantity of information so as to identify any deviation from the initial state and thereby detect corruption associated with the stack in the storage device.
2. The method as defined in claim 1, wherein the initial state of the quantity of information represents a bit pattern.
3. The method as defined in claim 1, wherein the initial state of the quantity of information represents a processor readable address.

1 4. The method as defined in claim 1, wherein the
2 initial state of the quantity of information represents a
3 processor readable instruction.

1 5. The method as defined in claim 1, further
2 comprising the step of:

3 adding data to the stack after inserting the
4 quantity of information adjacent to the stack in the storage
5 device.

1 6. The method as defined in claim 5, wherein the data
2 is added during a push operation, further comprising the step
3 of:

4 recording the push operation after identifying any
5 deviation from the initial state.

1 7. The method as defined in claim 1, further
2 comprising the step of:

3 removing data from the stack after inserting the
4 quantity of information adjacent to the stack in the storage
5 device.

1 8. The method as defined in claim 7, wherein the data
2 is removed during a pop operation, further comprising the
3 step of:

4 recording the pop operation after identifying any
5 deviation from the initial state.

1 9. The method as defined in claim 1, further
2 comprising the step of:

3 restoring the quantity of information to the
4 initial state after identifying any deviation from the
5 initial state.

1 10. The method as defined in claim 1, wherein the step
2 of inserting the quantity of information adjacent to the
3 stack in the storage device includes:

4 inserting a first quantity of information adjacent
5 to a top of the stack in the storage device; and

6 inserting a second quantity of information adjacent
7 to a bottom of the stack in the storage device.

1 11. A system for detecting corruption associated with
2 a stack in a storage device, the system comprising:

3 a processor; and

4 a storage medium for storing instructions that are
5 readable by the processor and thereby cause the processor to
6 operate so as to:

7 insert a quantity of information adjacent to
8 the stack in the storage device, the quantity of information
9 having an initial state; and

10 inspect the quantity of information so as to
11 identify any deviation from the initial state and thereby
12 detect corruption associated with the stack in the storage
13 device.

1 12. The system as defined in claim 11, wherein the
2 initial state of the quantity of information represents a bit
3 pattern.

1 13. The system as defined in claim 11, wherein the
2 initial state of the quantity of information represents a
3 processor readable address.

1 14. The system as defined in claim 11, wherein the
2 initial state of the quantity of information represents a
3 processor readable instruction.

1 15. The system as defined in claim 11, further causing
2 the processor to operate so as to:

3 add data to the stack after inserting the quantity
4 of information adjacent to the stack in the storage device.

1 16. The system as defined in claim 15, wherein the data
2 is added during a push operation, further causing the
3 processor to operate so as to:

4 record the push operation after identifying any
5 deviation from the initial state.

1 17. The system as defined in claim 11, further causing
2 the processor to operate so as to:

3 remove data from the stack after inserting the
4 quantity of information adjacent to the stack in the storage
5 device.

1 18. The system as defined in claim 17, wherein the data
2 is removed during a pop operation, further causing the
3 processor to operate so as to:

4 record the pop operation after identifying any
5 deviation from the initial state.

1 19. The system as defined in claim 11, further causing
2 the processor to operate so as to:

3 restore the quantity of information to the initial
4 state after identifying any deviation from the initial state.

1 20. The system as defined in claim 11, further causing
2 the processor to operate so as to:

3 insert a first quantity of information adjacent to
4 a top of the stack in the storage device; and

5 insert a second quantity of information adjacent
6 to a bottom of the stack in the storage device.

1 21. A computer system including a mechanism for
2 detecting corruption associated with a stack in a storage
3 device, the computer system comprising:

4 a computer readable storage medium; and

5 computer programming stored on the storage medium;

6 wherein the stored computer programming is configured to be
7 readable from the computer readable storage medium by one or
8 more computers and thereby cause the one or more computers
9 to operate so as to:

10 insert a quantity of information adjacent to
11 the stack in the storage device, the quantity of information
12 having an initial state; and

13 inspect the quantity of information so as to
14 identify any deviation from the initial state and thereby
15 detect corruption associated with the stack in the storage
16 device.

1 22. The computer system as defined in claim 21, wherein
2 the initial state of the quantity of information represents
3 a bit pattern.

1 23. The computer system as defined in claim 21, wherein
2 the initial state of the quantity of information represents
3 a processor readable address.

1 24. The computer system as defined in claim 21, wherein
2 the initial state of the quantity of information represents
3 a processor readable instruction.

1 25. The computer system as defined in claim 21, further
2 causing the one or more computers to operate so as to:

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